

What is claimed is:

1. A device for operating a high pressure discharge lamp comprising:  
a high pressure discharge lamp having a silica glass discharge vessel filled with at least  $0.15 \text{ mg/mm}^3$  of mercury and in which a pair of opposed electrodes are disposed, and  
a feed device which supplies a discharge current to the discharge lamp,  
wherein the feed device includes a means for applying an AC voltage to the discharge lamp during a glow discharge when lamp operation is initiated, to apply a DC voltage for a pre-selected time to the discharge lamp after a transition from the glow discharge into an arc discharge, and after the pre-selected time has expired, to apply an AC voltage to the discharge lamp.
2. A device for operating a high pressure discharge lamp as claimed in claim 1, wherein the feed device is adapted to set a frequency of the AC voltage which is applied to the discharge lamp during the glow discharge higher than a frequency of the AC voltage which is applied during steady-state operation of the discharge lamp.
3. A device for operating a high pressure discharge lamp as claimed in claim 1, wherein the feed device provides a high voltage pulse for initiating the discharge lamp only at a certain polarity of the AC voltage.